Flexible Foxtrails



Enhancing Foxpro applications using Adobe Flex and the Foxtrails framework

Intro

- Why bother?
 - Foxpro is great at manipulating data
 - But the interface is a bit dated
 - We can make it better

Adobe Flex

- ◆ Adobe Flex is essentially a programmer-oriented version of Flash. It's relatively easy for programmers to get started creating compelling graphical interfaces
- But it's not so great at manipulating data
- In fact, it exists inside a security sandbox and cannot access databases or the filesystem directly.

Foxpro & Flex

Allows creation of a compelling modern UI with Foxpro's ease of database access

Foxtrails

- Used as the glue between Foxpro and Flex.
- Essentially, it's a web page running inside of Foxpro that relies on services provided by Fox trails to allow interaction between the two applications.
- Foxtrails web site runs on local network, servicing requests from Flex for data and sending updates back to Foxpro

Sample Sites

- Quotepro Agent Dashboard: https://www.quotepro.com/swf/agentdashboard.hml?agentcode=888880
- Constitutional Payment Lookup http://www.constitutional.com.

Building our Demo App

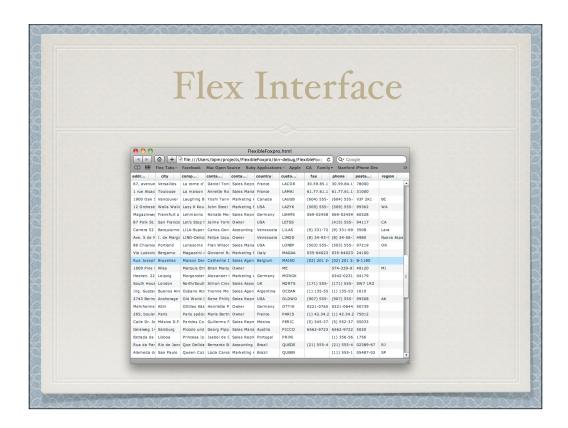
- Interface first: A small flex application that displays a grid of customers
- Next we'll design a foxtrails data feed for the grid
- Finally we'll add the flex application to a foxpro formal and demonstrate how to communicate user actions back to Foxpro using browser events.

About Data Formats

- SOAP and XML are horribly redundant data formats
- see http://www.jamesward.com/census/ for benchmarks of alternative data transfer protocols
- For our demo application we'll use the JSON data format, it's roughly half the size of an equivalent XML data stream.

A few JSON examples

- var person = { name: "John Doe", age: 43, weight: 180 }
- var fruits = [{ name: "Apple", price: 1.99 }, { name: "Orange", price: 1.50 }];
- var order = { customer: person, items: fruits };



Flex components

- HttpService -- used to retrieve the data from Foxtrails
- ArrayCollection -- stores the customer data for use in the grid
- ♠ AdvancedDataGrid -- supports sorting by multiple columns, grouping and summarizing data.
- BrowserManager -- used to send notifications to Foxpro

Foxtrails

- ◆ Using our existing customer controller, we'll add a new method that returns a list of customers formatted using JSON instead of the existing html list.
- ◆ Procedure JSONList.
- ◆ JSONList.vml -- scans the customer table, creating a json object for each row of data.

JSONList.vml

Foxpro Application

- We'll add a Microsoft Browser Control to our application, then add event handlers for the BeforeNavigate event.
- In the control's init method, we open the Flex Application.
- Lastly, we add an event handler to listen for click events within the grid

Summary

• Flex Applications paired with Foxpro data provide an enhanced user experience while leveraging the corestrengths of Foxpro.